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WRECK COVE HYDRO ELECTRIC PROJECT

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ENVIRONMENTAL ASSESSMENT PANEL REPORT

TO THE

MINISTER OF FISHERIES AND THE ENVIRONMENT

FEDERAL ENVIRONMENTAL ASSESSMENT REVIEW OFFICE

OTTAWA K1A 0H3

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Fisheries and Environment Canada | Pêches et Environnement Canada

REPORT TO THE MINISTER OF FISHERIES AND ENVIRONMENT

FROM

THE ENVIRONMENTAL ASSESSMENT PANEL

WRECK COVE HYDRO ELECTRIC PROJECT

INTRODUCTION

WRECK COVE is a hydro electric project located in the highlands plateau of Cape Breton Island on land adjacent to Cape Breton Highlands National Park. There is no permanent settlement within the project area which reaches an elevation of 1500 feet. WRECK COVE is designed to produce 200 megawatts of peaking power at a 15 percent load factor. This will be achieved by diverting a portion of headwater flows from seven rivers, covering a drainage area of 84 square miles. Four major impoundments, created by the construction of 19 dykes and dams will be joined by a series of connecting canals and tunnels. One of the major impoundments, Cheticamp Lake, will divert part of the waters of the Cheticamp River which flows westward through the National Park.

The project land is owned by the Province, with the exception of the 10-square-mile Cheticamp Lake area which is owned by the federal government. At the request of the Province, the latter was removed from the Park in 1958 when planning for the project first began. Since that time these lands have been managed by the Department of Indian and Northern Affairs as federal crown lands but have not been subject to the National Parks Act.

The Nova Scotia Power Corporation (NSPC) recommenced planning for the project in 1974. At that time the Minister of Indian and Northern Affairs agreed in principle to an exchange of the Cheticamp Lake lands for those of an equivalent natural value elsewhere in the Province, on the condition that there should be no adverse effects from the project on the

National Park. In late 1974 a private consultant prepared a preliminary environmental evaluation of the project's probable effects. Following a review of this evaluation a resolution was passed by the Nova Scotia Legislature in January 1975 indicating that the project was to proceed, and "that a phased environmental assessment be undertaken to minimize potential adverse effects". In March 1975, Nova Scotia Minister of the Environment, Mr. Bagnell, joined with Mme Sauvé, the federal Minister of the Environment, in calling for a new assessment of the project's environmental effects with particular emphasis on the segment involving the Cheticamp River system. Details of the agreement were contained in a March 1975 joint Canada-Nova Scotia press release. The Nova Scotia Department of the Environment was to be responsible for the coordination of the assessment and the NSPC was to produce the Environmental Impact Statement (EIS) under joint guidelines approved by the federal and Nova Scotia Departments of Environment. Both Environment Departments were to co-chair a public meeting on completion of the EIS. The federal government chose the Environmental Assessment and Review Process (EARP) as the federal review mechanism. All Panel members come from the Department of the Environment with the exception of one member from Parks Canada.

Planning for the project was well advanced at the time agreement was reached between the two Environment Deparments on the content and thrust of the Environmental Impact Statement and construction had been approved by the Nova Scotia Legislature. Because of this the EIS was not designed to assess the broad project alternatives as is normally the case. Its focus was to be as follows:

- It was to be prepared as a phased document relating to the construction phases of the Wreck Cove project.

- It was to contain an evaluation of the alternatives for the Cheticamp area from no flooding of the Cheticamp Lake area to flooding as proposed by the developer.

- Project stages which were already well advanced would be subjected to overall impact assessment with emphasis on the design of adequate mitigation measures to offset documented impacts on the environment.

THE PROJECT UNDER EARP

A joint federal-provincial task force produced EIS guidelines which the Panel approved and issued in September 1975. The interim Environmental Impact Statement was received by the Panel on May 26, 1976. The Panel reviewed the submission, arranged for, and received a review of the Statement by federal scientists and outside experts. The panel also questioned NSPC and their consultants to obtain further clarification in several areas. Jointly with the Nova Scotia Department of the Environment, the Panel received public opinion on the interim EIS at a public meeting held at Baddeck, Cape Breton Island, Nova Scotia, July 9, 1976.

The meeting was co-chaired by Dr. H. Hill, then Acting Chairman of the federal Environmental Assessment Panel, and Mr. D. Carter, then Director of Environmental Impact Assessment for the Nova Scotia Department of the Environment. A brief presentation outlining the nature of the project and its likely impact by NSPC and their consultants was followed by briefs presented by registered participants. The meeting concluded with a short question period. Ten briefs were received, nine of which were presented orally. About 200 people attended the meeting. A transcript of the proceedings of the meeting was distributed to all participants.

Subsequent to the Baddeck Public Meetings, it was discovered that the projected Cheticamp Reservoir (level 1534') would flood roughly 375 acres of Cape Breton Highlands National Park. The problem was studied and documented by Parks Canada and by federal Fisheries and Environment staff. A request was then made to Nova Scotia Power Corporation to document the problem and to find alternative reservoir plans or structures which would avoid or minimize flooding in the Park.

The Final Environmental Impact Statement was produced by the Nova Scotia Power Corporation and distributed in May, 1977. Following review, the Nova Scotia Department of the Environment found that all provincial environmental concerns had been adequately dealt with and therefore did not participate in the final round of public meetings. The Nova Scotia Department of the Environment did however distribute the five-volume report to several Halifax and Cape Breton libraries and to offices of Parks Canada and the Nova Scotia Power Corporation. Copies were also mailed to interveners who appeared at the July 1976 public meeting at Baddeck.

The federal Panel placed notices of public meetings in several Nova Scotia daily and weekly newspapers. The purpose of these meetings was to permit the federal Panel to hear the public on environmental implications pertaining to the use of federal lands in the Cheticamp Lake area. The notices reported where the Final Environmental Impact Statement could be viewed and gave 30 days notice for the meetings. On June 20-21, 1977 the federal Wreck Cove Environmental Assessment Panel held public meetings at Halifax and Sydney.

PUBLIC CONCERNS

The following is a summary of the main issues raised during the July 1976 public meeting at Baddeck:

(a) the interim environmental impact statement was not made freely available for public scrutiny, and inadequate time was allowed between its distribution and the public meeting for the public to prepare briefs;

(b) the guidelines were not adhered to in the preparation of the interim environmental impact statement especially with reference to the consideration of the Cheticamp area;

(c) the federal Environmental Assessment and Review Process was applied at a late stage in the planning and development of the project;

(d) the secretive nature of governments throughout the project's planning and development stages;

(e) construction of the Cheticamp portion of the project would proceed before adequate analysis of the downstream effects could be completed;

(f) there was concern expressed about the continued viability of the trout and salmon populations especially in the Cheticamp River system;

(g) loss of moose habitat and impediments to the movement of moose and deer that certain portions of the project would present;

(h) the continued viability of the breeding populations of greater yellow legs, grey-checked thrush, osprey and bald eagle in the project area;

(i) that the guaranteed riparian flows recommended by the consultant and accepted by the NSPC would be inadequate to protect fish stocks;

(j) the lack of overall management strategy as requested in the guidelines for the EIS.

During the public meetings held by the federal Panel in Halifax and Sydney on June 20-21, 1977, the public concerns included points (c) and (j) from the above list and the following additional points:

(a) The need for an overall management strategy for the area south of the Park was repeatedly raised as an outstanding issue. The concern included the need for public input into its planning. It was indicated that the strategy should consider limited vehicle and power boat access and use, protection of wilderness values in the national park, appropriate forest management practices, controlled hunting and fishing, protection of unique habitats, rehabilitation and clean up of construction sites, and steps to avoid not only pressure on wildlife populations because of reduced critical habitat, but also population shifts triggered by clear cutting of forests near the Park boundary.

(b) Also of major concern was the integrity of the national park and in particular intervenors proposed:

i) Further excising of lands from the national park should be avoided so as not to create a precedent.

ii) Flooding of national park lands in the Cheticamp Lake area should be avoided now and in the future.

iii) Steps should be taken to maintain adequate river flows and water quality standards in the Cheticamp River to ensure the preservation of fish stocks.

(c) Other issues were raised which included:

i) It was noted that the final environmental impact statement did not adequately address energy demand and the need for the project; socio-economic issues including the temporary "overheating" of the economy and disruptions to the way of life locally; arrangements for the possible abandonment of the project at some future date; and the environmental implications of proceeding with the Wreck Cove Project without the Cheticamp Reservoir.

ii) Criticism was levelled at all participants in the process regarding the conduct of the review. In particular, criticism was expressed to the Panel because the August, 1976 Panel report to you was not made public. It was requested that this report be made public for the record.

iii) Compensation for lost fish stocks was called for in the form of fish passage facilities and hatcheries.

iv) A follow-up monitoring program during and after construction was called for to ensure prescribed mitigation measures are effective.

ENVIRONMENTAL ISSUES OF FEDERAL CONCERN

(a) Environmental issues associated with the use of Cheticamp Lands

The National Parks Act seeks to preserve parklands in a natural state for the benefit of man, in perpetuity. Therefore the integrity of Cape Breton Highlands National Park is of particular concern. The significant environmental effects of the project on park lands are as follows:

i) Flooding of Park Lands by the Cheticamp Reservoir

The Cheticamp proposal preferred by the NSPC as described in the final Environmental Impact Statement would have caused flooding of roughly 375 acres of park lands. These lands include raised bogs which are classed by Parks Canada as rare and fragile landscapes and are accorded the highest protection possible under the National Parks Act. However, the NSPC proposal was modified at the June 20-21 public meetings. NSPC now proposes to construct the Cheticamp dam and spillway to an elevation which would not lead to flooding of lands within the National Park. However, NSPC proposes to build the structure so it could be raised if more storage were required in the future.

THE PANEL RECOMMENDS THAT NO FLOODING OCCUR WITHIN THE PARK NOW OR IN THE FUTURE AND THAT NO LANDS BE EXCISED FROM THE PARK FOR THIS PURPOSE.

ii) Cheticamp River Fish

The Cheticamp diversion will result in altered or reduced flows to the Cheticamp River with resultant impacts on the spring-run salmon fishery which provides a high-quality angling experience in the national park. There will also be an impact on trout stocks. The Fisheries and Marine Service of the Department of

Fisheries and the Environment has advised a year-round low flow of 41 cfs (cubic feet per second) at the Barrier Falls on the Cheticamp River is required to maintain the Cheticamp salmon. The Panel accepts this advice.

THE PANEL RECOMMENDS THAT THE SALMON IN THE CHETICAMP RIVER BE MAINTAINED AT HISTORIC LEVELS, THAT FLOWS REQUIRED TO ACHIEVE THIS BE PROVIDED AND THAT THE RESOURCE BE CONTINUALLY MONITORED AND MEASURES TAKEN TO ENSURE THE MAINTENANCE OF THIS RESOURCE.

THE PANEL RECOMMENDS THE CONSTRUCTION AND MAINTENANCE OF SEDIMENT CONTROL FACILITIES BELOW CHETICAMP DAM AND THAT THESE FACILITIES BE OPERATIONAL DURING AND AFTER DAM CONSTRUCTION.

THE PANEL RECOMMENDS THAT THE INLET STRUCTURE AT THE CHETICAMP RIVER SITE BE DESIGNED SO THAT WATER CAN BE DRAWN OFF AT THE MOST SUITABLE LEVELS TO MAINTAIN ADEQUATE WATER QUALITY FOR FISH POPULATIONS.

iii) Management of adjacent lands

It is recognized that the National Park may be affected by project-related and other activities on adjacent lands. Vehicular traffic, forestry operations and recreational activity such as hunting and fishing have potential to impact on the park environment and its wilderness state.

THE PANEL RECOMMENDS THAT ACCESS TO THE CHETICAMP LANDS DESIGNATED FOR TRANSFER BE CONTROLLED TO PROTECT THE PARK ENVIRONMENT AND THAT VEHICULAR TRAFFIC BE PROHIBITED EXCEPT FOR PROJECT-RELATED ACTIVITIES.

THE PANEL RECOGNIZES THE IMPORTANCE OF OBTAINING PUBLIC INPUT TO THE DEVELOPMENT OF THE MANAGEMENT STRATEGY FOR LANDS IN THE WRECK COVE PROJECT AREA AND RECOMMENDS THAT PARKS CANADA PARTICIPATE IN DEVELOPING THIS STRATEGY.

iv) Accessability to Information

The construction and operation of facilities on the Cheticamp lands could have an impact on the Park.

THE PANEL RECOMMENDS THAT ONLINE FLOW MEASUREMENT AT BARRIER FALLS BE PROVIDED BY THE PROPONENT AND THAT THE INFORMATION BE MADE AVAILABLE TO FEDERAL AGENCIES ON REQUEST. THE PANEL FURTHER RECOMMENDS THAT DESIGN AND CONSTRUCTION INFORMATION BE SUPPLIED TO PARKS CANADA BY THE PROPONENT IN ORDER THAT STEPS MAY BE TAKEN TO AVOID PARK IMPAIRMENT.

(b) Other Fishery Concerns

The Panel acknowledges that the Fisheries and Marine Service of the Department of Fisheries and the Environment has developed mitigation measures to fisheries problems on other streams and watersheds in the project area and that tentative agreement has been reached on these matters by the Service and the Nova Scotia Power Corporation. The Service will be negotiating a mitigation and compensation package including maintenance flows, reservoir management, fish hatchery development, fish stocking, and silt run-off control systems. The Panel supports the Fisheries and Marine Service in this endeavor.

(c) Assessment and Review Process

The Panel wishes to bring to your attention a number of deficiencies in the Process which affected its credibility and effectiveness.

All information required for the public to play an informed role in the process was not made available in an understandable form at the earliest possible stage and continuously throughout the process.

The Process was applied too late for a timely environmental evaluation of the major project alternatives.

IT IS RECOMMENDED THAT:

- IN FUTURE EARP PROJECTS ALL INFORMATION REQUIRED FOR THE PUBLIC TO PLAY AN INFORMED ROLE BE MADE FREELY AVAILABLE AT THE EARLIEST POSSIBLE STAGE, AND SUPPLEMENTED CONTINUOUSLY THROUGHOUT THE PROCESS.

- THE PROCESS SHOULD BE CLEARLY EXPLAINED TO THE PUBLIC.

- FEDERAL AGENCIES BE FURTHER AND CONTINUOUSLY ADVISED OF THE IMPORTANCE OF EARLY REFERRAL FOR PROJECTS REQUIRING PANEL REVIEW.

CONCLUSION

The Panel concludes that the Cheticamp portion of the Wreck Cove hydroelectric project may be constructed and operated with acceptable environmental impact provided the recommendations advanced in this report are implemented.

H. M. Hill, Chairman
Wreck Cove
Environmental Assessment Panel

J. A. Dalziel

V. C. Dohaney

W. D. Harper

N. E. MacEachern